MXD55

INSTALLATION/OWNER'S MANUAL

AM/FM/CD Marine Receiver

MARINE

iplug™
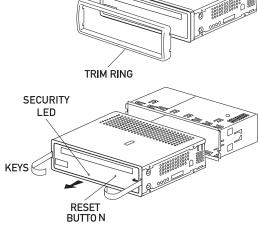
Dual®

Preparation

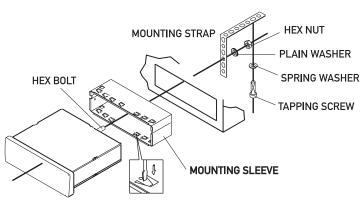Please read entire manual before installation.

Before You Start
• Disconnect negative battery terminal. (consult a qualified technician for instructions)
• Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight, or where it would be subject to dust, dirt or excessive vibration.

Getting Started
• Remove 2 transit screws located on top of the unit.
• Insert the supplied keys into the slots as shown, and slide the unit out of the mounting sleeve.
• Install mounting sleeve into opening, bending tabs to secure.
• Connect wiring harness and antenna. (consult a qualified technician if you are unsure)
• Test for correct operation and slide into mounting sleeve to secure.
• Snap trim ring into place.
• Mount the iplug™ adapter to any smooth clean surface using the supplied double-sided tape or #2 x 3/8" Phillips head screws.
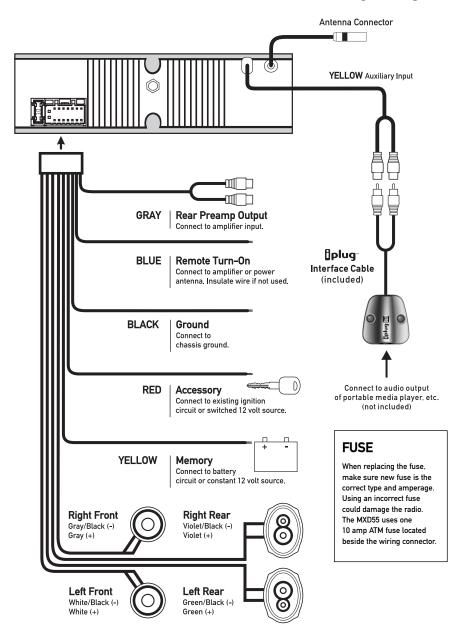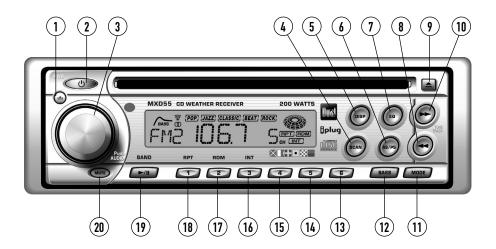
TRIM RING

SECURITY LED

KEYS

RESET BUTTON

MOUNTING STRAP

HEX NUT

PLAIN WASHER

SPRING WASHER

TAPPING SCREW

HEX BOLT

MOUNTING SLEEVE

TYPICAL FRONT-LOAD DIN MOUNTING METHOD

Wiring Diagram

Antenna Connector

YELLOW Auxiliary Input

GRAY | **Rear Preamp Output**
Connect to amplifier input.

BLUE | **Remote Turn-On**
Connect to amplifier or power antenna. Insulate wire if not used.

BLACK | **Ground**
Connect to chassis ground.

RED | **Accessory**
Connect to existing ignition circuit or switched 12 volt source.

YELLOW | **Memory**
Connect to battery circuit or constant 12 volt source.

iplug™
Interface Cable
(included)

Connect to audio output of portable media player, etc. (not included)

Right Front
Gray/Black (–)
Gray (+)

Right Rear
Violet/Black (–)
Violet (+)

Left Front
White/Black (–)
White (+)

Left Rear
Green/Black (–)
Green (+)

FUSE

When replacing the fuse, make sure new fuse is the correct type and amperage. Using an incorrect fuse could damage the radio. The MXD55 uses one 10 amp ATM fuse located beside the wiring connector.

Control Locations

1	Release	11	Mode
2	Power	12	Bass Boost
3	Volume/Audio Adjustment	13	Preset 6
4	Tuner Scan	14	Preset 5
5	Display	15	Preset 4
6	Auto Store/Preset Scan	16	Preset 3/CD Intro
7	EQ	17	Preset 2/CD Random
8	Tune/Track Down	18	Preset 1/CD Repeat
9	Eject	19	Play/Pause/Band
10	Tune/Track Up	20	Mute

*Semi-permanent Faceplate Attachment   Before installation, remove trim ring and install supplied Phillips head #1 x 7/32" screw through left side of mounting frame into faceplate.

General Operation

Faceplate Removal	Press **RELEASE** and pull away from the left side to remove. To re-install, insert right side of faceplate first then push left side to secure.
Power On/Off	Press **PWR** or any other button (except eject) to turn the unit on. Inserting a CD will turn the unit on automatically. Press **PWR** to turn the unit off.
Mode	Press **MODE** to select between AM/FM tuner, weatherband tuner, CD player and auxiliary input. Modes of operation are indicated in the display.
Bass Boost	Press **BASS** to activate and deactivate bass boost curve. Activating this feature will enhance the bass frequencies when listening to music at all volumes.
Volume	Adjust volume using rotary encoder (00-46).
Programmable Turn-On Volume	Press and hold **PWR** for 3 seconds to program currently selected volume level.
Confirmation Beep	Press rotary encoder for 3 seconds to turn confirmation beep on/off.
Mute	Press **MUTE** to silence the audio. Press **MUTE** again to cancel.
Preset EQ Curves	Press **EQ** to select between **POP**, **JAZZ**, **CLASSIC**, **BEAT**, **ROCK** and **OFF** (default) equalization curves. Any adjustment to the Bass or Treble settings automatically cancels the current EQ curve (if one is selected).
Display	Press **DISP** to select between clock and radio frequency (tuner modes) or CD elapsed time/track (CD player mode).
Set the Clock	With the unit on, press and hold **DISP** until clock begins to flash, then release. Press **TUNE ►►** to adjust the hours and **TUNE ◄◄** to adjust the minutes. Press **DISP** momentarily to save the selected time.
12/24-hour Clock	The clock will display 12-hour AM/PM time in USA frequency spacing mode (PM 10:00). In European frequency spacing mode, the clock will display 24-hour time (22:00).

General Operation

Programmable Display Priority	Press and hold **DISP** then press **TUNE** ▶▶ to select function priority display. "FREQ" will momentarily appear in the display. Radio frequency (tuner modes) or CD elapsed time/track (CD player mode) will be displayed by default. Clock is accessed by pressing **DISP** momentarily. Press and hold **DISP** then press **TUNE** ◀◀ to select time display priority. "TIME" will momentarily appear in the display. Clock will be displayed by default. Radio frequency or CD elapsed time/track is accessed by pressing **DISP** momentarily.
Programmable Clock Priority	Programs unit to display clock/no clock when unit is off. Press and hold **MODE** then press **PRESET 1** to turn clock priority on/off. "ON CLOC" or "NO CLOC" will momentarily appear in the display.
Reset	Press and hold for more than 2 seconds to **RESET** the unit upon initial installation or if abnormal operation occurs. The **RESET** button is located behind the faceplate.
Audio	Press rotary encoder to select between Volume (default), Bass, Treble, Balance & Fader.

$$\rightarrow \text{VOL} \rightarrow \text{BAS} \rightarrow \text{TRE} \rightarrow \text{BAL} \rightarrow \text{FAD}$$

Bass	Press rotary encoder until **BAS** appears then rotate encoder left/right to adjust (-6 minimum / +6 maximum).
Treble	Press rotary encoder until **TRE** appears then rotate encoder left/right to adjust (-6 minimum / +6 maximum).
Balance	Press rotary encoder until **BAL** appears then rotate encoder left/right to adjust (L12-0-R12) 00 represents equal balance.
Fader	Press rotary encoder until **FAD** appears then rotate encoder left/right to adjust (R12-0-F12) 00 represents equal fader.
Source Audio Memory	Individual Bass and Treble settings are retained in memory for AM, FM, Weatherband, CD, and AUX modes. This allows you to save the Bass and Treble settings separately for each mode. For example, FM tuner mode can have Bass +3 and Treble -1 while CD mode can have Bass +2 and Treble +2.

AM/FM Tuner Operation

Seek Tuning	Press **TUNE ◄◄** or **TUNE ►►** momentarily to seek the next strong station.
Manual Tuning	Press **TUNE ◄◄** or **TUNE ►►** for more than 2 seconds, then release. "MANU" will momentarily appear in the display. Press **TUNE ◄◄** or **TUNE ►►** momentarily to move radio frequency up or down one step at a time. Press and hold to advance quickly. If tuning is not adjusted for 5 seconds, the unit will return to seek tuning mode (default). "AUTO" will momentarily appear in the display.
Scan Tuning	Press **SCAN** to preview strong stations on the current band, pausing for 5 seconds at each. Press **SCAN** again to cancel.
Band	Press **BAND** to select between FM1, FM2, FM3 and AM1, AM2 bands.
Frequency Spacing	Press and hold **BAND** then press **TUNE ◄◄** to select European frequency spacing. Press and hold **BAND** then press **TUNE ►►** to select USA frequency spacing (default). Anytime frequency spacing is changed, all station presets are erased.
Storing and Recalling Station Presets	Up to 18 FM stations and 12 AM stations can be stored. To store a station, select the desired band and station. Press and hold the desired preset button for more than 2 seconds. When stored, the preset number will appear in the display. The station can be recalled anytime by pressing the corresponding preset button.
Automatically Store Stations	Press **AS/PS** for more than 3 seconds to automatically store the six strongest stations in the current band. Automatic Local/Distance is activated during the initial band scan.
Preset Scan	Press **AS/PS** to scan presets 1-6 on the current band, pausing for 5 seconds at each. Press **AS/PS** again to cancel.

Weatherband Tuner Operation

Manual Tuning | Press **TUNE ◄◄** or **TUNE ►►** momentarily to seek the next weatherband station.

Direct Tuning | Press preset 1-6 or **BAND** to directly access the 7 weatherband stations. Refer to the table below.

Weatherband Stations - Direct Tuning Table		
Button	**WB Frequency**	**LCD Display**
Preset 1	162.400 MHz	Wb - 1
Preset 2	162.425 MHz	Wb - 2
Preset 3	162.450 MHz	Wb - 3
Preset 4	162.475 MHz	Wb - 4
Preset 5	162.500 MHz	Wb - 5
Preset 6	162.525 MHz	Wb - 6
BAND	162.550 MHz	Wb - 7

CD Player Operation

Insert CD	With the label facing up, insert a standard size CD into the CD slot. The CD will automatically begin playback.
Eject CD	Press **EJECT** to eject the CD. The unit will change to previous mode of operation (AM/FM tuner, Weatherband tuner or auxiliary input). If the disc is not removed within 10 seconds, the unit will reload the disc. The unit does not have to be turned on to eject CD.
Track Select	Press **TRACK ▶▶** to skip to the beginning of the next track. Press **TRACK ◀◀** to return to the beginning of the current track. Pressing **TRACK ◀◀** again skips to the beginning of the previous track.
Fast Forward and Reverse	Press and hold **TRACK ▶▶** or **TRACK ◀◀** to fast forward or reverse a track.
Pause	Press ▶/❚❚ to temporarily stop CD playback. Press ▶/❚❚ again to resume playback.
Intro	Press **INT** to play the first 10 seconds of each track. Press **INT** again to cancel.
Repeat	Press **RPT** to continuously repeat selected track. Press **RPT** again to cancel.
Random	Press **RDM** to play all tracks in random order. Press **RDM** again to cancel. Random mode is retained in memory when selecting between modes and when the unit is turned on/off.
CD-R Compatibility	Some CD-Rs may be incompatible with this unit, depending on media type and recording method. This model does not support CD-RWs.

Limited One-Year Warranty

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Dual Electronics Corp. warrants this product to the original purchaser to be free from defects in material and workmanship, under normal conditions, for a period of one year from the date of the original purchase.

Dual Electronics Corp. agrees, at our option, during the warranty period, to repair any defect in material or workmanship or to furnish an equal new or renewed product in exchange without charges, subject to verification of the defect or malfunction and proof of the date of purchase.

During the One-Year Warranty Period: For One Year from the date of purchase, your product will be replaced with a new, renewed or comparable product (whichever is deemed necessary) if it becomes defective or inoperative. This is done without charge to you. Replacement products are warranted for the balance of the original warranty period.

Who is covered? This warranty is extended to the original retail purchaser for products purchased and used in the U.S.A.

What is covered? This warranty covers all defects in material and workmanship in this product. The following are not covered: installation/removal costs, damage resulting from accident, misuse, abuse, neglect, product modification, improper installation, incorrect line voltage, unauthorized repair or failure to follow instructions supplied with the product, or damage occurring during return shipment of the product.

What to do?
If purchased within the USA:
1. Before you call for service, check your operating instruction booklet. A slight adjustment of any custom controls discussed in your instruction booklet may save you a service call.

2. If you require service during the warranty period, you must carefully pack the product (preferably in the original package) and ship it by prepaid transportation with proof of the purchase date from the retailer to the Return Center address listed below.

3. Please describe your problem in writing and include your name, a return UPS shipping address (P.O. Box not acceptable), and a daytime phone number with your shipment.

4. DUAL will pay the return shipping charges if the product is returned to an address within the 48 contiguous states.

Dual Electronics Corp.
Attn: Returns Center
21318 64th Ave. South
Kent, WA 98032 U.S.A.
Toll Free: 1-866-626-7863

If purchased outside the USA:
Please return the unit to original place of purchase for warranty service.

Exclusion of Certain Damages: This warranty is exclusive and in lieu of any and all other warranties, expressed or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose and any obligation, liability, right, claim or remedy in contract or tort, whether or not arising from the company's negligence, actual or imputed. No person or representative is authorized to assume for the company any other liability in connection with the sale of this product. In no event shall the company be liable for indirect, incidental or consequential damages.

Specifications

CD Player | Signal-to-noise: **>92dB**
Frequency response: **10Hz-20kHz**
Channel separation @ 1kHz: **>65dB**
D/A converter: **1 Bit**

FM Tuner | Tuning range: **87.5MHz-107.9MHz**
Usable sensitivity: **8.5dBf**
50dB quieting sensitivity: **10dBf**
Stereo separation @ 1kHz: **40dB**
Frequency response: **30Hz-13kHz**

AM Tuner | Tuning range: **530kHz-1710kHz**
Usable sensitivity: **22uV**
Frequency response: **30Hz-2.2kHz**

Wetherband Tuner | Tuning range: **162.400MHz-162.550MHz**

General | Total power output: **200 Watts Peak**
Power output: **50Wx4 @ 4 ohms, 14.4 VDC**
Operating voltage: **11-16 VDC, negative ground**
Speaker output impedance: **4~8 ohms**
Line output voltage: **2V**
Dimensions: **7" x 7" x 2" (178 x 178 x 51 mm)**

Design and specifications subject to change without notice.

Troubleshooting

Problem	Cause	Action
Unit will not turn on (no power)	Yellow wire not connected or incorrect voltage Red wire not connected or incorrect voltage	Check connections for proper voltage (11~16VDC)
	Black wire not connected	Check connection to ground
	Fuse blown	Replace fuse
Unit has power (but no sound)	Speaker wires not connected	Check connections at speakers
	One or more speaker wires touching each other or touching chassis ground	Insulate all bare speaker wires from each other and chassis ground
Unit blows fuses	Yellow or red wire touching chassis ground	Check for pinched wire
	Speaker wires touching chassis ground	Check for pinched wire
	Incorrect fuse rating	Use fuse with correct rating
Excessive skipping	Unit is not mounted correctly or backstrap is not secure	Check mounting sleeve and backstrap support
	Physical defect in media (CD or CD-R)	Check media for scratches
ER02 appears on display	Load/Eject operation error	Press eject or RESET
ER03 appears on display	Focus adjustment error	Clean or replace media
ER04 appears on display	Tracking auto adjustment error	Clean or replace media
ER06 appears on display	Sled operation error	Press eject or RESET
ER07 appears on display	Focus error or disc is in upside down	Press eject or RESET
ER08 appears on display	CLV (PLL) operation error	Press eject or RESET
ER09 appears on display	TOC data read error	Clean or replace media

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NSA0405-V01